

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P644756

Luminaire Tested: OMN4DIP-SR4F0-125D25U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644756  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DIP-SR4F0-125D25U830-FLLOOB-1DUDD-WW  
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE  
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT  
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

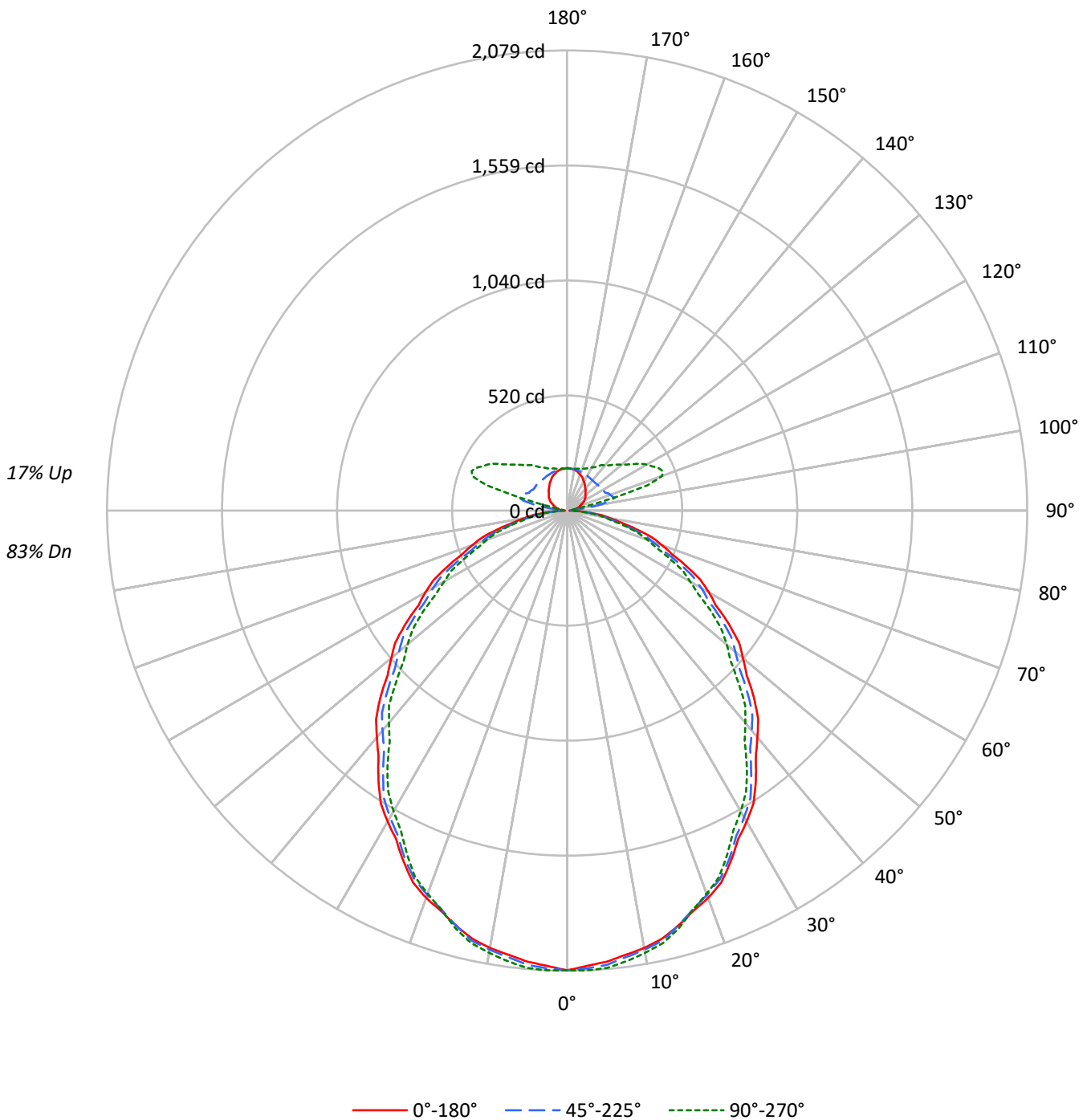
Lumens per Lamp: N/A  
Luminaire Lumens: 6092.9 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 48.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	115	115	115	115	110	110	110	110	102	102	102	94	94	94	86	86	86	83				
1	105	101	97	93	101	97	93	90	89	87	84	83	80	78	76	75	73	70				
2	96	88	82	76	92	85	79	74	79	74	70	73	69	66	67	64	62	59				
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50				
4	81	69	61	54	77	67	59	53	62	56	51	58	52	48	54	49	46	43				
5	74	62	53	47	71	60	52	46	56	49	44	52	46	42	49	44	40	38				
6	69	56	47	41	66	54	46	40	51	44	39	47	41	37	44	39	35	33				
7	64	51	42	36	61	49	41	36	46	39	34	43	37	33	40	35	32	29				
8	59	46	38	33	57	45	37	32	42	36	31	40	34	30	37	32	28	26				
9	55	43	35	29	53	41	34	29	39	32	28	37	31	27	34	29	26	24				
10	52	39	32	27	50	38	31	26	36	30	25	34	28	24	32	27	24	22				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	33532	33532	33532
5°	33156	33386	33614
10°	32891	33029	33262
15°	32448	32448	32637
20°	31995	31751	31654
25°	31158	30907	30505
30°	30238	29817	29237
35°	29296	28570	27902
40°	28169	27335	26382
45°	27227	26195	24905
50°	26048	24912	23634
55°	25056	23783	22351
60°	23906	22627	20712
65°	22670	21051	19431
70°	21475	19473	18142
75°	20093	17804	16924
80°	18391	16290	15500
85°	17266	15172	14135

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 27227 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.4	3.2
10°-20°	548.2	9.0
20°-30°	797.1	13.1
30°-40°	906.7	14.9
40°-50°	884.1	14.5
50°-60°	754.7	12.4
60°-70°	548.4	9.0
70°-80°	310.1	5.1
80°-90°	95.9	1.6
90°-100°	35.5	0.6
100°-110°	174.2	2.9
110°-120°	231.4	3.8
120°-130°	187.4	3.1
130°-140°	149.1	2.4
140°-150°	117.3	1.9
150°-160°	85.8	1.4
160°-170°	53.3	0.9
170°-180°	18.2	0.3
0°-30°	1540.7	25.3
0°-40°	2447.5	40.2
0°-60°	4086.2	67.1
0°-90°	5040.7	82.7
90°-120°	441.2	7.2
90°-150°	894.9	14.7
90°-180°	1052.0	17.3
0°-180°	6092.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2077	2077	2077	2077	2077	
5°	2046	2076	2060	2057	2074	194
15°	1941	1966	1941	1939	1952	547
25°	1749	1766	1735	1704	1712	805
35°	1486	1492	1450	1416	1416	928
45°	1192	1187	1147	1107	1091	918
55°	890	887	845	805	794	794
65°	593	588	551	517	509	589
75°	322	311	285	274	271	342
85°	93	82	82	79	76	100
90°	11	15	19	18	18	12
95°	32	29	18	19	19	28
105°	51	66	223	281	184	55
115°	75	86	190	390	456	75
125°	101	114	180	309	365	89
135°	118	131	178	254	292	91
145°	139	151	179	222	245	88
155°	164	169	183	201	210	75
165°	182	184	188	192	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2076.8	2076.8	2076.8	2076.8	2076.8
2.5°	2058.7	2085.2	2070.0	2070.2	2079.1
5°	2045.7	2076.1	2059.9	2057.4	2074.0
7.5°	2024.2	2054.1	2035.0	2032.1	2053.6
10°	2006.2	2033.8	2014.6	2009.4	2028.8
12.5°	1981.3	2008.9	1989.8	1982.3	2001.6
15°	1941.2	1966.0	1941.2	1938.7	1952.5
17.5°	1896.0	1917.5	1888.6	1879.3	1889.8
20°	1862.1	1881.4	1847.9	1834.0	1842.3
22.5°	1819.1	1838.5	1802.7	1782.1	1792.6
25°	1749.0	1765.6	1734.9	1704.0	1712.3
27.5°	1673.9	1686.6	1655.8	1624.2	1627.0
30°	1621.9	1630.2	1599.3	1565.4	1568.2
32.5°	1567.6	1573.7	1540.5	1504.4	1504.9
35°	1486.3	1491.8	1449.5	1415.6	1415.6
37.5°	1399.8	1403.1	1358.0	1321.2	1317.3
40°	1336.5	1342.0	1296.9	1260.0	1251.7
42.5°	1277.7	1278.8	1238.2	1201.2	1190.7
45°	1192.4	1186.9	1147.2	1107.3	1090.7
47.5°	1100.3	1100.3	1055.1	1015.2	999.7
50°	1037.0	1037.0	991.8	952.0	940.9
52.5°	978.2	976.0	933.0	893.1	877.6
55°	890.1	887.3	844.9	805.0	794.0
57.5°	796.8	796.8	757.3	714.6	702.4
60°	740.3	740.3	700.7	658.0	641.4
62.5°	679.3	677.1	637.5	599.4	589.4
65°	593.4	587.8	551.0	516.9	508.6
67.5°	511.4	505.9	466.8	439.5	434.0
70°	454.9	449.4	412.5	389.8	384.3
72.5°	400.7	392.9	360.5	342.3	336.8
75°	322.1	311.1	285.4	274.0	271.3
77.5°	247.5	228.7	218.1	210.2	207.4
80°	197.8	181.2	175.2	169.5	166.7
82.5°	154.8	138.3	136.8	133.3	130.5
85°	93.2	82.2	81.9	79.1	76.3
87.5°	40.7	34.8	35.5	35.2	35.2
90°	11.3	15.2	19.4	17.7	17.7
92.5°	23.2	18.3	17.7	19.3	18.0
95°	32.2	29.4	18.1	19.3	18.9
97.5°	36.8	45.7	78.6	25.9	20.9
100°	42.6	54.3	147.5	44.6	30.5
102.5°	46.1	58.8	197.5	113.0	60.9
105°	51.4	65.8	223.2	280.7	183.9
107.5°	59.5	69.6	213.4	407.3	378.9
110°	63.0	74.3	207.6	427.8	456.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	68.8	80.1	201.8	415.8	466.4
115°	74.6	85.9	190.4	389.8	455.6
117.5°	83.5	94.6	188.2	364.6	432.3
120°	90.2	100.4	184.3	345.4	415.9
122.5°	92.8	106.1	179.5	328.9	393.8
125°	100.6	113.5	179.5	309.0	365.4
127.5°	104.8	120.1	179.8	285.9	341.6
130°	108.6	122.7	180.7	270.5	323.4
132.5°	111.2	125.3	178.5	263.5	307.0
135°	117.8	130.7	177.9	254.5	292.1
137.5°	123.8	137.7	177.9	244.5	276.7
140°	128.6	141.6	177.9	238.7	268.1
142.5°	133.4	145.4	178.9	231.9	259.4
145°	139.4	151.2	179.1	221.7	245.2
147.5°	146.7	157.0	180.6	214.4	232.5
150°	151.5	160.9	181.5	209.5	224.8
152.5°	156.3	164.7	181.5	205.6	218.1
155°	163.5	169.4	182.7	201.0	210.4
157.5°	169.3	174.9	184.2	198.0	204.8
160°	173.1	177.8	185.1	196.1	201.9
162.5°	176.0	180.7	186.1	195.1	199.1
165°	181.5	183.9	187.5	192.4	195.9
167.5°	184.6	186.8	188.7	191.2	193.3
170°	187.5	188.7	188.7	191.2	192.3
172.5°	188.5	190.6	189.7	190.2	191.4
175°	191.1	192.3	191.1	189.9	188.7
177.5°	191.1	192.1	191.1	191.1	190.2
180°	191.1	191.1	191.1	191.1	191.1

(END OF REPORT)